Minutes from the September 7, 2004 MSFC PMC Prepared by QD02/Rich Gladwin

DD01/Rex Geveden chaired the meeting. The agenda included a single presentation by the Demonstration of Autonomous Rendezvous Technology (DART) project.

Jim Snoddy presented the DART project's request for MSFC PMC authorization to complete implementation of the project. QD/Gerry Flanagan asked if system retest requirements were addressed after components were removed. Mr. Snoddy replied that system retest was considered and that no issues were identified. The project is still in the process of reviewing verification data. DD01/Rex Geveden asked if the DCR was a functional and configuration audit type review. Mr. Snoddy replied that the DCR was a more of a delta CDR and partial DCR. As a result of the DCR inadequate components were sent back for retest. Mr. Geveden asked what kind of penalty test was required to reintegrate the AVGS. Mr. Snoddy replied that Limited Performance Testing (LPT) would be done. Mr. Geveden asked if the AVGS was installed for environmental testing. Mr. Snoddy replied that AVGS was installed for critical tests including EMI and thermal (SN2). Mr. Geveden asked how the project had addressed workmanship issues associated with trading out boxes and installing spares. Mr. Snoddy replied that the government witnessed bolt torquing at interfaces, LPTs were performed and that all copper paths were verified. However Mr. Snoddy indicated that full AVGS functionality is not tested during LPT. FD/Mr. Goss asked if the statement that the only lens in spec would not be used. Mr. Snoddy replied that the focal length spec was not right and was being modified to correct the spec since the system requires a more defocused lens. Mr. Flanagan asked what AVGS problems were found after the DCR. Mr. Snoddy replied that a software escape and the focal length problems were the major issues identified. Either problem would have resulted in a mission failure if they had not been corrected. TD/Doug Blackwell asked if OSC had raised any issues on the project. Mr. Snoddy replied that OSC had not uncovered any significant issues. Mr. Geveden asked if OSC would be providing a certificate of flight readiness (CoFR). Mr. Snoddy indicated that OSC would provide a CoFR statement prior to the pre-FRR. Mr. Geveden asked if the MSFC subsystem engineers would be signing system CoFR statements to the support the project CoFR statement. Mr. Snoddy replied that subsystem engineers did not formally sign any CoFR statement but that they had signed a system certification through the project CCB. Mr. Geveden asked if the DART project was a "Faster, Better, Cheaper" project that required additional insight or if it was a case of the prime contractor not performing well which resulted in the increased insight. Mr. Snoddy replied that it was some of both. Mr. Geveden asked if it was possible for the project to justify its TRL 7 goals with the ground testing that had been accomplished. Mr. Snoddy replied that a case could be made that the hardware-in-the-loop testing could be used to justify that TRL 7 had been achieved in some areas. QD01/Jan Davis asked if the reliability estimates presented were design reliability estimates or mission success reliability. Mr. Snoddy acknowledged that only the design reliability estimate could be substantiated by analysis. Mr. Geveden stated that future presentations to MSFC customers should use qualitative descriptions to characterize the mission success reliability and risk of the project. Mr. Geveden asked if Admiral Steidle would be participating in the mission readiness review. Mr. Snoddy replied that Admiral Steidle was represented on the FRR pre-Board. Mr. Geveden asked that an offer be extended to brief the NASA Administrator on the DART project prior to launch. The DART project was

given an action to update its project plan. The project was recommended to proceed through completion of the project.

Action 1 from 09-07-04:

Assigned to: UP40/Jim Snoddy

Action: Revise the DART project plan to update the budget and schedule, define MSFC

PMC as the GPMC, and describe the test and verification approach.

Due Date: September 30, 2004

The meeting was then concluded.

Attendance for MSFC PMC – September 7, 2004

Council Members	<u>Organization</u>
Rex Geveden	DD01
Jim Bilbro	DA01
Gerry Flanagan	VS10
Frank Mayhall (for Susan Foster)	RS01
Teresa Vanhooser	ED01
Robert Goss (for Tony Lavoie)	FD01
Ann Whitaker	SD01
Doug Blackwell (for Chris Singer)	TD01
Jan Davis	QS01
Jim Carter	AD01
Elaine Hamner (for Steve Beale)	PS01
Bill Hicks	LS01
W.M. Blackman (for Tereasa Washington)	CD01
Jim Ellis	AD30
Danny Johnston	ED40

Others in Attendance	Organization
Rich Gladwin (PMC Secretary)	QD02
Fred Roe	ED19
Chris Bramon	UP50
Marcie Kennedy	QD11
Warren Woods	QD40
Jack Bullman	ED10
Renee Cox	UP50
John McDougal	QD02
Dinah Williams	QD02
Alberto Duarte	TD02
Prince Kalia	QD40